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## III. CLAIMS

- 1-9. Cancelled
- 10. (Withdrawn) A method according to claim 9, wherein the fibrin matrix is used in an angiogenesis test.

11-13. Cancelled

- 14. (Withdrawn) A pharmaceutical composition, comprising fibrinogen and a pharmaceutically acceptable carrier, wherein the fibrinogen consists of a selected fibrinogen variant or a fibrinogen enriched or depleted in a fibrinogen variant.
- 15. (Withdrawn) A pharmaceutical composition according to claim 14, wherein the fibrinogen consists of HMW fibrinogen or of a mixture of fibrinogen variants enriched in HMW fibrinogen or depleted in LMW en/of LMW' fibrinogen.
- 16. (Withdrawn) A pharmaceutical composition according to claim 15, which is suitable for promoting wound healing, inhibiting or preventing cicatrization or treating burns.
- 17. (Withdrawn) A pharmaceutical composition according to claim 14, wherein the fibrinogen consists of LMW fibrinogen or of a mixture of fibrinogen variants enriched in LMW fibrinogen or depleted in HMW fibrinogen.
- 18. (Withdrawn) A pharmaceutical composition according to claim 14, wherein the fibrinogen consists of LMW' fibrinogen or of a mixture of fibrinogen variants enriched in LMW' fibrinogen or depleted in HMW fibrinogen.

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19. (Withdrawn) A pharmaceutical composition according to claim 17, which is suitable for inhibiting or preventing tumor growth or adhesions.

- 20. (Withdrawn) A test kit, comprising components for the formation of a fibrin matrix, including fibrinogen, wherein the fibrinogen consists of a selected fibrinogen variant or a fibrinogen enriched or depleted in a selected fibrinogen variant.
- 21. (Withdrawn) A test kit according to claim 20, wherein the fibrinogen consists of HMW fibrinogen or of a mixture of fibrinogen variants enriched in HMW fibrinogen or depleted in LMW and/or LMW' fibrinogen.
- 22. (Withdrawn) A test kit according to claim 20, also comprising an enzyme suitable for forming fibrin from fibrinogen, such as thrombin, and optionally factor XIIIa and/or CaCl<sub>2</sub>.
- 23. (Withdrawn) A test kit according to claim 20, also comprising components for effecting angiogenesis.
- 24. (Withdrawn) A test kit according to claim 23, comprising as components for effecting angiogenesis one or more angiogenic growth factors, such as fibroblast growth factor-2 (FGF-2) or vascular endothelial growth factor (VEGF), and/or tumor necrosis factor alpha (TNF- $\alpha$ ), and/or cells, such as human endothelial cells.

25-40. Cancelled

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- 41. (New) A method for modifying the angiogenesis properties of a fibrin matrix comprising the steps of
- a. selecting a composition selected from the group essentially consisting of:
- i) a composition comprising fibrinogen, wherein the fibrinogen has an HMW content of at least 80% (w/w) of the total fibrinogen amount;
- ii) a composition comprising fibrinogen, wherein the fibrinogen has an HMW content of less than 60% (w/w) of the total fibrinogen amount;
- iii) a composition comprising fibrinogen, wherein the fibrinogen has an LMW content of at least 40% (w/w) of the total fibrinogen amount; and
- iv) a composition comprising fibrinogen, wherein the fibrinogen has an LMW content of less than 20% (w/w) of the total fibrinogen amount; and
  - b. forming a fibrin matrix from said composition.
- 42. (New) A method according to claim 41, wherein a fibrin matrix is formed which leads to accelerated angiogenesis.
- 43. (New) A method according to claim 41, wherein a fibrin matrix is formed which leads to decelerated angiogenesis.
- 44. (New) A method for modifying angiogenesis in a patient, comprising administering to such patient a fibrin matrix modified by a process comprising the steps of:
- a. selecting a composition selected from the group essentially consisting of:
- i) a pharmaceutical composition comprising fibrinogen and a pharmaceutically acceptable carrier, wherein the fibrinogen has an HMW content of at least 80% (w/w) of the total

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fibrinogen amount;

ii) a pharmaceutical composition comprising fibrinogen and a pharmaceutically acceptable carrier, wherein the fibrinogen has an HMW content of less than 60% (w/w) of the total fibrinogen amount;

- iii) a pharmaceutical composition comprising fibrinogen and a pharmaceutically acceptable carrier, wherein the fibrinogen has axe LMW content of at least 40% (w/w) of the total fibrinogen amount; and
  - iv) a pharmaceutical composition comprising fibrinogen and a pharmaceutically acceptable carrier, wherein the fibrinogen has a LMW content of less than 20% (w/w) of the total fibrinogen amount; and b. forming a fibrin matrix from said composition.
- 45. (New) A method according to claim 44, wherein the fibrin matrix is formed in vitro, where the fibrin matrix is formed by enzymatic conversion and optionally factor XIIIa and CaCl<sub>2</sub>, into fibrin.
- 46. (New) A method according to claim 44, wherein the fibrin matrix is formed *in vivo*, by applying the fibrinogen composition as defined in step (b), optionally in combination with an enzyme and optionally factor XIIIa and CaCl<sub>2</sub>, in a place where the formation of the fibrin matrix takes place.